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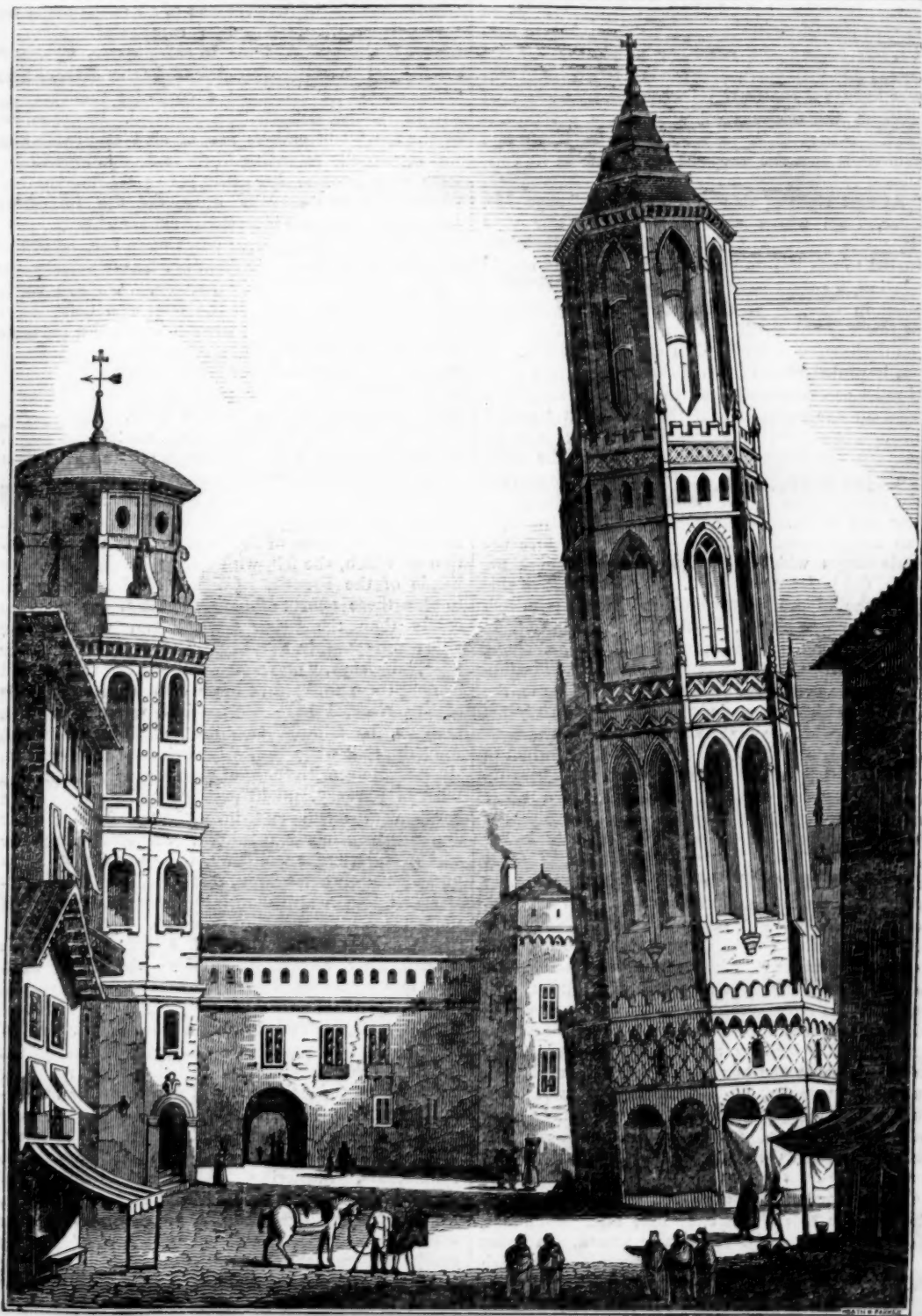
JANUARY



3RD, 1835.

PRICE
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UNDER THE DIRECTION OF THE COMMITTEE OF GENERAL LITERATURE AND EDUCATION,
APPOINTED BY THE SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE.



THE LEANING TOWER OF SARAGOSSA.

THE curious building represented in the engraving contained in the preceding page, is an object of considerable interest in the Spanish town of Saragossa. It bears the name of *Torre Nuevo*, or New Tower,—which is rather inapplicable now, considering that it has been erected since the year 1594; its present use is that of a belfry. We need hardly tell our readers that it does not stand upright; they will see it in the view, leaning rather fearfully towards the church, which stands on the opposite side of the street. It looks, indeed, like its famous rival of Pisa*, as though every moment it were going to fall; but it has looked the same for nearly the last two hundred and fifty years, and has not fallen yet. It is rather lofty, the ascent to its top being by 280 steps; and from the upper balcony a noble prospect is gained. The style of its architecture is pretty and ornamental; and the material employed in its construction is brick.

"At first sight of this curious edifice," says Mr. Locker, from whom we have borrowed our view of it, "the question, 'How it came so?' instantly occurred to us; but we found it not so easy to obtain a solution, for the critics of Saragossa seem as much divided in opinion as those of Pisa; and though their tower is not so old by four centuries, the cause of its declination is involved in equal perplexity. It is not improbable that the foundation may have sunk during its erection, and that the architect may have carried up the remainder of his work as a triumph of his art, counterbalancing the inferior side, in order to prevent the fabric from oversetting, in the same manner as the antiquaries profess to have discovered in the construction of the Pisan tower."

The city of Saragossa possesses many attractions in an architectural point of view, and before the terrible sieges which it had to sustain against the French, did boast many more. The first siege of this city is one of the most wonderful known; indeed, to use the words of Mr. Southey, "there is not, in the annals of ancient or of modern times, a single event recorded, more worthy to be held in admiration now and for evermore." Saragossa was one of the few cities which succeeded in holding out against Buonaparte, when he first attempted to make himself master of the kingdom of Spain; and the conduct of its inhabitants, in the midst of the calamities to which they were exposed, affords truly a noble example of constancy and valour.

It was on the 14th of July, 1808, shortly before the first British army, under the Duke of Wellington, sailed for Portugal, that a French force, under Lefebvre Desnouettes, first advanced to take possession, as was thought, of Saragossa. The city was unfortified, being only surrounded by a brick wall, from ten to twelve feet high; nor did its situation afford any advantages for defence. It is curious that a writer, who lived more than a century back, speaking of its want of fortifications, adds, "but this defect is repaired by the bravery of the inhabitants." After the proofs which the inhabitants have given of their courage, this praise, as Mr. Southey observes, appears like prophecy. On this occasion they were under the orders of Palafox, and that general took such measures as he deemed best suited to the emergency.

On the morning following their arrival, the French attempted to storm the city, but, after much loss, were obliged to desist from their attack. A delay of nine days ensued, and the assault was then renewed; but, meeting with a fresh repulse, Lefebvre

began to bombard the city. Shells and grenades were showered down in fearful profusion, and there was not one building which was bomb-proof within the walls. The inhabitants, however, worked well and bravely against their powerful assailants. "They tore down the awnings from their windows, and formed them into sacks, which they filled with sand, and piled up before the gates, in the form of a battery, digging round it a deep trench. They broke holes for musketry in the walls and intermediate buildings, and stationed cannon where the position was favourable for it. Women of all ranks assisted; they formed themselves into companies,—some to relieve the wounded, some to carry water, wine and provisions, to those who defended the gates. The Countess Burita instituted a corps for this service; she was young, delicate, and beautiful. In the midst of the most tremendous fire of shot and shells she was seen coolly attending to those occupations which were now become her duty; nor throughout the whole of a two months' siege, did the imminent danger to which she incessantly exposed herself, produce the slightest apparent effect upon her, or in the slightest degree bend her from her heroic purpose."

Nor was she the only heroine. On one occasion, it happened that all the men who defended a battery against which the French directed a tremendous fire, had been killed; Augustina Saragossa, a young woman of the lower ranks, happened to arrive with refreshments, at the moment when the citizens were hesitating to re-man the guns. She sprang forward, "over the dead and dying, snatched a match from the hand of a dead artilleryman, and fired off a six-and-twenty pounder; then jumping upon the gun, made a solemn vow never to quit it alive during the siege." She lived, however, throughout the rest of that siege and the whole of the second, after the termination of which, she fell, with other prisoners, into the hands of the French. Colonel Napier is disposed to view these efforts of female heroism rather more coldly than the writer from whom we take the above extract—Mr. Southey. "The current romantic tales," he says, "of women rallying the troops, and leading them forward at the most dangerous periods of this siege, I have not touched upon, and may, perhaps, be allowed to doubt, although it is not unlikely, that when suddenly environed with horrors, the delicate sensitiveness of women driving them to a kind of phrensy, might produce actions above the heroism of men; and in patient suffering, their superior fortitude is manifest; wherefore, I neither wholly believe, nor will deny, their exploits at Saragossa; merely remarking, that for a long time afterwards, Spain swarmed with heroines, clothed in half uniforms, and loaded with weapons."

At length, on the third of August, the French opened their breaching-batteries; the slight walls were quickly knocked down, and the besiegers rushed forward to the attack. They entered the street of St. Engracia, so called after a famous convent of that name, and passing down to its extremity, set fire to the General Hospital. A hideous and revolting spectacle ensued; the sick and wounded threw themselves from the windows to escape the flames, and the madmen, who were confined within the building, "issued forth," says Colonel Napier, "among the combatants, muttering, shouting, singing, and moping, according to the character of their disorder, while drivelling idiots mixed their unceasing cries with the shouts of contending soldiers." After much fighting, the French succeeded in forcing their way into the street called the Cozo, in the very centre of the city; and before evening, they were in

* See *Saturday Magazine*, Vol. II., p. 242.

possession of one half of Saragossa. Lefebvre now thought it the time to make proposals for a surrender, and he addressed this brief note to Palafox:—

"Head Quarters, St. Engracia. Capitulation."

The reply of the Spaniard was equally laconic:—

"Head Quarters, Saragossa War to the knife."

The contest which ensued was indeed terrific; Mr. Southey calls it "unexampled in history," and describes it with his usual graphic power. "One side of the Cozo," he says, "a street about as wide as Pall Mall, was possessed by the French; and in the centre of it, their general, Verdier, gave his orders from the Franciscan convent. The opposite side was maintained by the Aragonese, who threw up batteries at the openings of the cross-streets, within a few paces of those which the French erected against them. The intervening space was presently heaped with dead, either slain upon the spot, or thrown out from the windows. Next day, the ammunition of the citizens began to fail; the French were expected every moment to renew their efforts for completing the conquest, and even this circumstance occasioned no dismay, nor did any one think of capitulation. One cry was heard from the people, wherever Palafox rode among them, that, if powder failed, they were ready to attack the enemy with their knives—formidable weapons, in the hands of desperate men." Fortunately, however, fresh supplies arrived, and the contest was then renewed, being continued from street to street, from house to house, and from room to room.

This state of almost uninterrupted conflict lasted throughout eleven successive days and nights; neither party evincing the slightest disposition to yield. The Spaniards fought like men who knew the doom which awaited them, in the case of their being vanquished; and the French were maddened with indignation at such resistance from a town, which all the rules of war declared to be untenable. It was almost certain death for either party to appear by day-light within reach of the houses occupied by the other; but when darkness came on, the combatants frequently dashed across the street to attack each other's batteries.

The number of the killed was very great, and their bodies lay where they fell; the atmosphere was tainted, and it was feared that pestilence would ensue. Palafox adopted the expedient of tying ropes to the French prisoners, and pushing them forward to bring away the bodies; for he knew that it would be only exposing his followers to certain death, were he to send them to perform the task. Throughout the whole of this dreadful trial, the fortitude of the besieged remained unshaken; their spirit seemed to rise with their successes, and at length they left the French only one-eighth instead of one-half of the city. News began to arrive which was very disheartening to the enemy; and on the morning of the 14th the French columns were discovered in full retreat.

Saragossa was less fortunate on the second occasion of its being besieged by the French, in the month of November, the same year. After holding out till the middle of February in the following year, it was obliged to capitulate.

With the hand we demand, we promise, we call, dismiss, threaten, entreat, supplicate, deny, refuse, interrogate, admire, reckon, confess, repent; express fear, express shame, express doubt; we instruct, command, unite, encourage, swear, testify, accuse, condemn, acquit, insult, despise, defy, disdain, flatter, applaud, bless, abase, ridicule, reconcile, recommend, exalt, regale, gladden, complain, afflict, discomfort, discourage, astonish; exclaim, indicate silence, and what not? With a variety and a multiplication that keep pace with the tongue.—MONTAIGNE.

THE COAL TRADE OF NEWCASTLE AND SUNDERLAND.

THE number of working collieries on the river Tyne in the year 1829 was forty-one; on the north side twenty-three, and on the south side eighteen. On the river Wear, six on the north, and twelve on the south side, making eighteen; the whole number on both rivers being fifty nine.

The collieries on the Tyne are capable of raising double their present quantity of coals with the same machinery, but not with the same number of men. Those on the Wear are capable of raising one-half more. The reason why these collieries do not work to their full extent, is, that there is not a sufficient market to take off the quantity of coals that could be so raised.

A much greater proportion of superior coals comes from the collieries on the Wear, than from those on the Tyne.

Within the preceding fifteen years, the number of collieries on the Wear has increased, and collieries of larger power have come into action during that time. Several new collieries have also been opened on the Tyne, whilst on the Tees there has been a considerable increase in the export of coals.

In some cases, the coal which is obtained from the pit is about 90 per cent.; and, according to the present improved system of working the mines, all the coal, or nearly all, is got out of the earth; that which remains behind being scarcely worth mentioning.

There are collieries in the North which have cost from ten or twelve thousand to 150,000 pounds, in sinking the pits, the establishment of machinery, and every thing requisite for putting the coal on board the craft, whether into keels or barges, or into ships. This sum includes railways, wagons, and machinery.

Collieries are usually worked by adventurers. On the Tyne there are only five proprietors, out of the forty-one collieries on that river, who work their own mines; on the Wear there are only three; all the rest are in the hands of lessees, or adventurers.

The aggregate money-capital employed by the coal-owners on the river Tyne, amounts to about a million and a half, exclusive of the craft in the river. Some of these persons are owners of the craft, but many hire keels or barges. The money-capital employed on the Wear is estimated at from six to seven hundred thousand pounds.

The wages of the colliers, if they could have full employment, are ample; but there is not full employment for them: fourteen shillings a week is their lowest wages; but they could earn five shillings per day, if they had work to enable them so to do.

There are a great number of well-meaning persons who have expressed great anxiety, arising from an apprehension that the time was rapidly approaching when the coal-mines of England would be exhausted, and that future generations would be deprived of the solace and comfort of a good coal-fire. In order to allay this natural anxiety, the following estimate of the extent and produce of the coal-mines of two counties in England only, and the proportion excavated, is given on the authority of Mr. Hugh Taylor, colliery agent to the Duke of Northumberland. This estimate does not include the coal-fields of Yorkshire, Cumberland, Lancashire, Staffordshire, Warwickshire, Monmouthshire, Gloucestershire, Somersetshire, or Wales.

The Durham Coal Field.—From South Shields southward to Castle Eden, 21 miles; thence westward to West Auckland, 32 miles; north-east from West Auckland to Eltringham, 33 miles; and thence to Shields, 22 miles; being an extent or area of square miles 594

Northumberland Coal Field.—From Shields north 27 miles, by an average breadth of 9 miles, being

Total square miles 837

Portion Excavated.—In Durham, on the Tyne, say 39 square miles; on the Wear 40 square miles—making 79 square miles.

In Northumberland, say thirteen miles by two, equal to twenty-six square miles; making the total excavated in those two counties to be 105 square miles. Thus leaving 732 square miles of coal in the counties of Durham and Northumberland only, yet to be excavated.

Estimating the workable coal-strata at an average thickness of twelve feet, the solid contents of one square mile will be 12,390,000 tons; and of 732 square miles, 9,069,480,000

tons. Deduct one-third for loss by small coal, interceptions by dikes, and other interruptions, 3,023,160,000, there remains 6,046,320,000 tons: a quantity adequate to supply the present vend from Newcastle, Sunderland, Hartley, Blythe, and Stockton, of 3,500,000 tons annually for a period of 1727 years.

There is also a considerable extent of coal-field in the northern and southern districts of Northumberland; but the foregoing comprises that which is continuous, and most suitable and available for exportation.

The number of persons employed under ground in the works on the Tyne are,—Men, 4937; Boys, 3554; together 8491. Above ground—Men, 2745; Boys, 718. Making together, 3463; which, added to the number employed under ground, will make a total of 11,954, which, in round numbers, may be called 12,000.

In the works on the river Wear there are 9,000 men and boys employed; which, with the 12,000 employed in the works on the Tyne, make the number engaged in digging and raising coal, and delivering it to the ships on the two rivers, to be 21,000. From the best calculations it would appear, that averaging the coasting-vessels that carry coals to the size of 220 London chaldrons each vessel, there would be 1400 vessels employed, which would require 15,000 seamen and boys to navigate them.

SUMMARY.

1400 Ships of 220 London Chaldrons.

Navigated by Seamen	15,000
Pitmen, and people employed above ground	21,000
Keelmen, Coal Boatmen, Casters & Trimmers	2000

Making the total number of Persons employed in the Coal Trade on the rivers Tyne and Wear	38,000
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This enumeration does not include returns from Blythe, Hartley, or Stockton, or from Scotland, but is strictly confined to the coal-works on the rivers Tyne and Wear.

In the year 1827, according to the Custom-House returns, there were 606 collier-ships belonging to the port of Sunderland, the tonnage of which amounted to 102,454 tons; and the number of ships that cleared out in that year with coals, was 7518. The town of Sunderland is principally, if not entirely, supported by the coal-trade; and there are variety of manufactures of different descriptions dependent upon it. The quantity of coals exported to foreign countries from Sunderland, on an average of four years, was 34,000 London chaldrons, and those sent coastwise 1,050,000 London chaldrons.

The collieries on the Tyne and Wear are subject to various accidents; more especially those which supply the best coals. The principal catastrophes to which they are subject are explosions, creeps, and drowning by water. One of the difficulties in sinking a shaft is that of passing through quicksands; another is the immense quantities of water which are met with in the cavernous parts of the stratification, generally within forty or fifty fathoms of the surface, which is always dammed back by what is called a "tub," or, more properly speaking, a cast-iron caisson. Mr. Buddle, in his evidence before the House of Lords, on the coal-trade, states that he sunk a shaft which required forty fathoms of cast-iron tubbing. At forty fathoms the strata became perfectly impervious to water. One of the accidents to which collieries are liable is the breaking of this caisson, which has frequently happened, the water then rushing down into the mine below and drowning it; thereby occasioning a suspension of the works, and very great expense, till the tub could be repaired, and the water drawn off. A double-power pumping-engine is then used, and there is then one shaft for the purpose of pumping the water out, and another for drawing the coal. Pits of 170 fathoms deep are subject to this drowning.

The quantity of coal worked depends upon the quantity required for the market; but the proportion between the quantity worked and the quantity sold has been thus calculated: Taking 700,000 as the whole quantity worked, then 500,000 of that quantity is exported to London and elsewhere; 100,000, is consumed by the collieries, and sold from the pits, for land sale and home consumption; and 100,000 is wasted.

The quantity of coals consumed in England and Wales is calculated as follows. In manufactories, 3,500,000 London chaldrons; in household consumption 5,500,000; making 9,000,000 London chaldrons consumed from inland collieries. The quantity sent coastwise on both sides of the island is 3,000,000 chaldrons, making twelve millions in all.

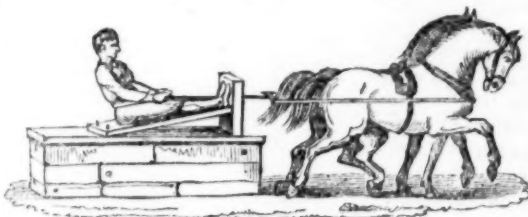
FEATS OF STRENGTH.

Most of the feats performed by jugglers and others, when properly examined, and stripped of their false colouring, prove to be either illustrations of some well-known property of matter, the application of mechanical power in an unusual way, or mere simple deceptions.

These observations may be illustrated by reference to a curious performance which took place in London some years back. The exhibitor, a strong athletic man, allowed a large stone to be laid on his chest, and broken to pieces by sledge-hammers, without appearing to suffer either pain or inconvenience. The performance of this feat would appear to require Herculean strength and great endurance; but it was founded simply on a correct knowledge of the result produced by striking a large body with a smaller one.

Another very curious feat is related by Dr. Brewster. John Charles van Eckenberg, a native of Harzgerode in Anhalt, travelled through Europe under the appellation of Sampson, exhibiting very remarkable feats of strength. He was a man of the middle size, and of ordinary strength; and as Dr. Desaguliers was convinced that his feats were exhibitions of skill, and not of strength, he was desirous of discovering his methods, and with this view he went to see him, accompanied by Dr. A. Stuart and others. They placed themselves round the German, so as to be able to observe accurately all that he did, and their success was so great, that they were able to perform most of the feats the same evening by themselves, and almost all the rest when they had provided a proper apparatus.

The performer sat upon an inclined board, placed upon a strong, fixed, square frame; round his loins was placed a strong girdle, in the front of which was an iron ring; to this ring a rope was fastened by means of a hook. The rope passed between his legs through a hole in the upright board, against which the performer's feet were placed, and several men, or two horses pulling, were unable to draw him out of his place. With his hands he grasped the rope, and seemed to pull against the horses. The due



performance of this feat depends almost entirely on the strength of the pelvis (the hip bones), which forms a double arch, and which it would require an immense force to break, if the pressure were directed directly downwards. The bones of the legs and thighs also, when standing upright, are sufficiently strong to support a weight of four or five thousand pounds, so that there was no difficulty in resisting the force of the two horses, if the legs were kept in a proper position.

To understand the first deception of breaking the stone with the sledge-hammers, we must consider the power of resistance possessed by different bodies when brought into contact with each other.

The force with which two bodies strike each other when brought into contact by some impelling power, depends upon two circumstances; namely, the velocities with which they are impelled, and the weight of the bodies themselves. Thus, two bodies of equal weights, and moving towards each other



THE FEAT OF BREAKING A STONE ON A MAN'S CHEST

with equal velocities, would, when they came in contact, strike each other with equal force; but if, although the weight was the same, one of these bodies was moving with four or five times the velocity of the other, then the quickest moving body would strike the slowest mover, with four or five times the force that would have otherwise been the case.

If we wish the slowest mover of two bodies to resist the blow of the quickest, it is necessary that the weight of the slowest should exceed that of the quickest, by as many times as the velocity of the smaller exceeds that of the larger. If this be done the striking force of the small body would be exactly balanced by the resistance of the larger, and both would remain at rest. If, therefore, the larger body be two hundred times the weight of the smaller, and at rest, then, although the velocity of the smaller increased its striking power to twenty pounds, still, on account of the great difference between twenty and two hundred, the blow would only be felt within a short distance of the point of contact; and this arises from what is called the *inert* power of resistance of the larger body, which is always in proportion to its weight, whether at rest or in motion.

It is, then, by the application of these laws, so as to produce the contingency of the last experiment, namely, to cause a large body, when at rest, to be struck by a smaller, that this feat is performed. At times, an anvil has been employed instead of a stone, but the breaking of the stone by the blows of the hammer, produces an appearance of greater difficulty in the experiment; and if the stone be well selected, no great force is necessary to cause the fracture of its whole substance.

The chief difficulty to the performer is the bearing, for any length of time, so heavy a weight as the stone or anvil on his chest; but a man in good health can support, for a moderate time, a much greater weight than is usually supposed, if, before the

weight is placed on his chest, he takes a deep inspiration, and keeps his muscles in a state of powerful action.

The following singular experiment, the cause of which is hitherto unexplained, is given in Dr. Brewster's own words.

"One of the most remarkable and inexplicable experiments relative to the strength of the human frame, is that in which a heavy man is raised with the greatest facility, the instant his own lungs, and those of the persons who raise him, are inflated with air. This experiment was, I believe, first shown in England a few years ago, by Major H., who saw it performed in a large party at Venice, under the direction of an officer of the American Navy. The heaviest person in company lies down upon two chairs, his legs being supported by one and his back by the other. Four persons, one at each leg, and one at each shoulder, then try to raise him, and they find his dead weight to be very great, from the difficulty they experience in supporting him. When he is replaced in the chair, each of the four persons takes hold of the body as before, and the person to be lifted gives two signals by clapping his hands. At the first signal he himself, and the four lifters, begin to draw a long and full breath, and when the inhalation is completed, or the lungs filled, the second signal is given, for raising the person from the chair. To his own surprise, and that of his bearers, he rises with the greatest facility, as if he were no heavier than a feather.

"On several occasions I have observed, that when one of the bearers performs his part ill, by making the inhalation out of time, the part of the body which he tries to raise is left as it were behind. At Venice, the experiment was performed in a much more imposing manner. The heaviest man in the party was raised and sustained upon the points of the forefingers of six persons."

HOW TO MAKE A QUARTERN LOAF OUT OF A DEAL-BOARD.

To make wood-flour in perfection, according to Professor Autenrieth, the wood, after being thoroughly stripped of its bark, is to be sawed transversely into disks, of about an inch in diameter. The saw-dust is to be preserved, and the disks are to be beaten to fibres, in a pounding-mill. The fibres and saw-dust, mixed together, are next to be deprived of every thing harsh and bitter which is soluble in water, by boiling them, where fuel is abundant, or by subjecting them for a longer time to the action of cold water, which is easily done by enclosing them in a sling sack, which they only half fill, and beating the sack with a stick, or treading it with the feet in a rivulet. The whole is then to be completely dried, either in the sun, or by fire, and repeatedly ground in a flour-mill. The ground wood is next baked into small flat cakes, with water, rendered slightly mucilaginous by the addition of some decoction of linseed, mallow stalks and leaves, lime-tree bark, or any other such substance. Professor Autenrieth prefers marsh-mallow roots, of which one ounce renders eighteen quarts of water sufficiently mucilaginous, and these serve to form four pounds and a half of wood-flour into cakes. These cakes are baked until they are brown on the surface. After this, they are broken to pieces, and again ground, until the flour pass through a fine bolting-cloth; and upon the fineness of the flour does its fitness to make bread depend. The flour of a *hard wood*, such as beech, requires the process of baking and grinding to be repeated. Wood-flour does not ferment so readily as wheaten-flour; but the Professor found fifteen pounds of birch-wood flour, with three pounds of sour wheat-leaven, and two pounds of wheat-flour, mixed up with eight measures of new milk, yielded thirty-six pounds of *very good bread*. The learned Professor tried the nutritious properties of wood-flour, in the first instance, upon a young dog; afterwards he fed two pigs upon it; and then, taking courage from the success of the experiment, he attacked it himself. His family party, he says, ate it in the form of gruel or soup, dumplings and pancakes, all made with as little of any other ingredient as possible; and found them palatable, and quite wholesome. Are we, then, instead of looking upon a human being stretched upon a bare plank, as the picture of extreme want and wretchedness, to regard him as reposing in the lap of abundance, and consider henceforth, the common phrase, "bed and board," as compounded of synonymous terms?

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TASTE FOR READING.

If I were to pray for a taste which should stand by me in stead under every variety of circumstances, and be a source of happiness and cheerfulness to me through life, and a shield against its ills, however things might go amiss, and the world frown upon me, it would be a taste for reading. I speak of it, of course, only as a worldly advantage, and not in the slightest degree derogating from the higher office and sure and stronger panoply of religious principles—but as a taste, an instrument, and a mode of pleasurable gratification. Give a man this taste, and the means of gratifying it, and you can hardly fail of making him a happy man, unless, indeed, you put into his hands a most perverse selection of books. You place him in contact with the best society in every period of history; with the wisest, the wittiest, with the tenderest, the bravest, and the purest characters who have adorned humanity. You make him a denizen of all nations—a contemporary of all ages. The world has been created for him.

It is hardly possible but the character should take a higher and better tone from the constant habit of associating in thought with a class of thinkers, to say the least of it, above the average of humanity. It is morally impossible but that the manners should take a tinge of good breeding and civilization from having constantly before our eyes the way in which the best-bred and best-informed men have talked and conducted themselves in their intercourse with each other. There is a gentle, but perfectly irresistible coercion in a habit of reading, well directed, over the whole tenour of a man's character and conduct, which is not the less effectual because it works insensibly, and because it is really the last thing he dreams of. It cannot be better summed up than in the words of the Latin poet—"Emollit mores, nec sinit esse feros." It civilizes the conduct of men, and suffers them not to remain barbarous.—SIR J. HERSCHEL.

HUMAN LIFE.

HUMAN LIFE is as the journey of a day: "we rise in the morning of youth, full of vigour, and full of expectation: we set forward with spirit and hope, with gaiety, and with diligence, and travel on awhile in the direct road, piety, towards the mansions of rest. In a short time, we remit our fervour, and endeavour to find some mitigation of our duty, and some more easy means of obtaining the same end. We then relax our vigour, and resolve no longer to be terrified with crimes at a distance; but rely upon our own constancy, and venture to approach what we resolve never to touch: we thus enter the bowers of ease, and repose in the shades of security. Here the heart softens, and vigilance subsides; we are then willing to inquire whether another advance cannot be made, and whether we may not at least turn our eyes upon the gardens of pleasure. We approach them with scruple, and hesitation; we enter them, but enter timorous and trembling; and always hope to pass through them, without losing the road of virtue, which for a while we keep in our sight, and to which we purpose to return. But temptation succeeds temptation, and one compliance prepares us for another: we in time lose the happiness of innocence, and solace our disquiet with sensual gratification. By degrees, we let fall the remembrance of our original intention, and quit the only adequate object of rational desire. We entangle ourselves in business, immerse ourselves in luxury, and rove through labyrinths of inconstancy; till the darkness of old age begins to invade us, and disease and anxiety obstruct our way: we then look back upon our lives with horror, with sorrow, with repentance, and wish, but too often vainly wish, that we had not forsaken the ways of virtue. Happy are they who shall learn from thy example, not to despair, that reformation is never hopeless, nor sincere endeavours ever unassisted; that the wanderer may at length return, after all his errors, and that he who implores strength and courage from above, shall find danger and difficulty give way before him.—DR. JOHNSON.

THE object of a good and wise man in this transitory state of existence should be to fit himself for a better, by controlling the unworthy propensities of his nature, and improving all its better aspirations; to do his duty first to his family, then to his neighbours, lastly to his country and his kind; to promote the welfare and happiness of those who are in any degree dependent upon him, or whom he has the means of assisting, and never wantonly to injure the meanest thing that lives; to encourage, as far as he may have the power, whatever is useful and ornamental in society, whatever tends to refine and elevate humanity; to store his mind with such knowledge as it is fitted to receive, and he is able to attain; and so to employ the talents committed to his charge, that when the account is required, he may hope to have his stewardship approved.—SOUTHEY.

THE language of reason, unaccompanied by kindness, will often fail of making an impression; it has no effect on the understanding, because it touches not the heart. The language of kindness, unassociated with reason, will frequently be unable to persuade; because, though it may gain upon the affections, it wants that which is necessary to convince the judgment. But let reason and kindness be united in a discourse, and seldom will even pride or prejudice find it easy to resist.—GIBBORNE.

It is impossible for the mind which is not totally destitute of piety, to behold the sublime, the awful, the amazing works of creation and providence; the heavens with their luminaries, the mountains, the ocean, the storm, the earthquake, and the volcano; the circuit of the seasons and the revolutions of empires; without marking in them all the mighty hand of God, and feeling strong emotions of reverence towards the Author of these stupendous works.—DWIGHT.

THE PAST AND THE PRESENT.

NOTHING is a greater reproach to the reasoning intellect of any age, than a splenetic censoriousness on the manners and characters of our ancestors. It is but common justice for us to bear in mind that in those times we should have been as they were, as they in ours would have resembled ourselves. Both are but the same men, acting under different circumstances, wearing different dresses, and pursuing different objects; but neither inferior to the other in talent, industry, or intellectual worth. The more we study biography, we shall perceive more evidence of this truth.

Disregarding what satire might, without being cynical, lash in our own costumes, we are to apt to look proudly back on those who have gone before us, and to regale our self-complacency with comparisons of their deficiencies, and of our greater merit. The retrospect is pleasing, but it offers no just grounds for exultation. We are superior, and we have in many things better taste, and sounder judgment, and wiser habits, than they possessed. And why? Because we have had means of superiority by which they were not assisted. But a merit which owes its origin merely to our having followed, instead of preceded, in existence, gives us no right to depreciate those over whom our only real advantage has been the better fortune of a later chronology. We may, therefore, allow those who have gone before us, to have been amused with what would weary or dissatisfy us, without either sarcasms on their absurdities, or contemptuous wonder at their stately childishness, and pompous inanities.—SHARON TURNER.

GOOD CUSTOM ON NEW YEARS' DAY.

It is the custom in New York, on the first day of the year, for the gentlemen to visit all their acquaintances; and the omission of this observance in regard to any particular family, would be considered as a decided slight. The routine is as follows: the ladies of a family remain at home to receive visits; the gentlemen are abroad, actively engaged in paying them. You enter, shake hands, are seated, talk for a minute or two on the topics of the day, then hurry off as fast as you can. Wine and cake are on the table, of which each visitor is invited to partake. The custom is of Dutch origin, and I believe, does not prevail in any other city of the Union. I am told, its influence on the social intercourse of families is very salutary; the first day of the year is considered a day of kindness and reconciliation, on which petty differences are forgotten, and trifling injuries forgiven. It sometimes happens, that between friends long connected, a misunderstanding takes place. Each is too proud to make concessions, alienation follows, and thus are two families, very probably, permanently estranged. But on this day of annual amnesty, each of the offended parties calls on the wife of the other, kind feelings are recalled, past grievances overlooked, and at their next meeting they take each other by the hand, and are again friends.

D. I. E.

[HAMILTON'S *Men and Manners in America*, p. 279.]

Is he not in reality the truest patriot who fills up his station in private life well; he who loves and promotes peace both public and private, who knowing that his country's prosperity depends much more on its virtues than its arms, resolves that his individual endeavours shall not be wanting to promote this desirable end? And is he not the greatest hero who is able to despise public honours for the sake of private usefulness, he who has learnt to subdue his own inclinations, to deny himself those gratifications which are inconsistent with virtue and piety, who has conquered his passions and brought them low even as a child that is weaned; is not such a man greater than he that taketh a city, sheddeth blood as it were water, or calls for the thundering applause of assembled multitudes? But if persons in general held these sentiments, if utility were substituted for show, and religious usefulness for worldly activity, how very little our public men would have to do! Truly they would be driven to turn their swords into ploughshares, and study the Gospel instead of the statutes.—TAYLOR.

THERE was never found in any age of the world, either philosophy, or sect, or religion, or law, or discipline, which did so highly exalt the good of communion, and depress good private and particular, as the holy Christian faith: whence it clearly appears that it was one and the same God that gave the Christian law to men, who gave those laws of nature to the creatures.—BACON.

THE AFRICAN LION.

THE appearance of the lion, when unannoyed, or in confinement, where he is generally very tame, does not convey to us that idea of ferocity which generally associates itself with the greater number of the feline race. His ample front, and overhanging brow, surrounded with a long and shaggy mane, remind us of something more majestic than ferocity; but the gleam from his eye on the slightest motion of the bystander, the expression of his countenance, and erection of his mane upon provocation, show that he will not be trifled with, and are sufficient intimations of the powers he is able to call to his assistance.

The general form of the lion is stronger in front, than the proportions of his kindred tribes; and his broad chest and shoulders, and thick neck, point out the strength he possesses to seize and carry off a prey of even greater weight than himself. His common colour is of a rich brownish yellow, and the head and neck of the males, are covered with long, flowing, and shaggy hair, commonly denominated the mane, which is wanting in the females. This mane, and the tuft at the extremity of the tail, are peculiar to the lion.

In the actions of all animals, the influence of hunger has a very powerful effect, and the attributes of cruelty which have generally been given to this race, have been called forth by their search after natural sustenance. In like manner are they endowed with cunning, and daring; and we accordingly find animals of such size and bulk as the lion and tiger, endowed with powers sufficient to overcome creatures both great and strong. When not pressed by the severe calls of hunger, the lion feeds chiefly at dawn and twilight, and is easily disturbed: he is nevertheless abroad during the whole night, and prowling round the herds of wild animals, or near the flocks of the settlers, or caravans of travellers, watches an opportunity, and, seizing upon some straggler, carries it to his place of repose, and devours it at leisure. But impelled by the cravings of hunger, which the scarcity of wild animals, and the care of the colonists sometimes force him to endure, he becomes a very different being: his cunning becomes daring, no barrier will withstand him—he rushes with resistless fury upon the object of his attack—a bullock is torn from the team, or a horse from the shafts—and even man is dragged from the watch-fires, surrounded by his companions, and powerful fire-arms.

Perseverance in watching, and in retaining his prey when seized, are other characteristics of the lion. An instance of the latter, is related in the *Journal of the Landdrost Sterneberg*, kept in his journey to the Namaqua Hottentots.

The wagons and cattle (says he,) had been put up for the night, when, about midnight, they got into complete confusion. About thirty paces from the tent, stood a lion, which, on seeing us, walked very deliberately a few paces further, behind a small thorn-bush, carrying something with him which I took to be a young ox. We fired more than sixty shots at the bush. The south-east wind blew strong, the sky was clear, and the moon shone very bright, so that we could perceive any thing at a short distance. After the cattle had been quieted again, and I had looked over every thing, I missed the sentry from before the tent. We called as loudly as possible, but in vain; nobody answered, from which I concluded he was carried off. Three or four men then advanced very cautiously to the bush, which stood right opposite the door of the tent, to see if they could discover any thing of the man, but returned holter-skelter; for the lion, who was still there, rose up, and began to roar. About a hundred shots were again fired at the bush, without perceiving any thing of the lion. This induced one of the men again to approach it, with a firebrand in his hand; but as soon as he approached the bush, the lion roared terribly,

and leaped at him, on which he threw the firebrand at him, and the other people having fired about ten shots, he returned immediately to his former station.

The firebrand which had been thrown at the lion, had fallen in the midst of the bush, and, favoured by the wind, it began to burn with a great flame, so that we could see very clearly into it, and through it. We continued our firing into it: the night passed away, and the day began to break, which animated every one to fire at the lion, because he could not lie there, without exposing himself. Seven men, posted at the furthest wagons, watched to take aim at him as he came out. At last, before it became quite light, he walked up the hill with the man in his mouth, when about forty more shots were fired, without hitting him. He persevered in retaining the prey, amidst the fire and shot, and carried it securely off. It may, however, be mentioned, that he was followed and killed in the forenoon, over the mangled remains of the unfortunate sentinel.

It is a common opinion among the South African tribes, that the lion will prefer human prey to any other, will single out the driver from his cattle, and prefer the rider to his horse. This notion has gained converts among the better informed, and in many of the colonies, it is generally received as a fact. Sometimes he will seize any prey, but animals are certainly his favourite luxury, and none more than a horse, the pursuit of which, among other cattle, has given rise to the idea that the rider most attracted his attention.

The lion, when taken young, is easily tamed, principally by mild and persuasive usage, and appears to possess more equality of temper than any of the other cats. Many of the keepers display more rashness than prudence, when strangers are admitted to participate in the performance; and it may be remarked, that the lion only, among the more powerful of the Cat tribe, will admit visitors to a share of his benevolence.

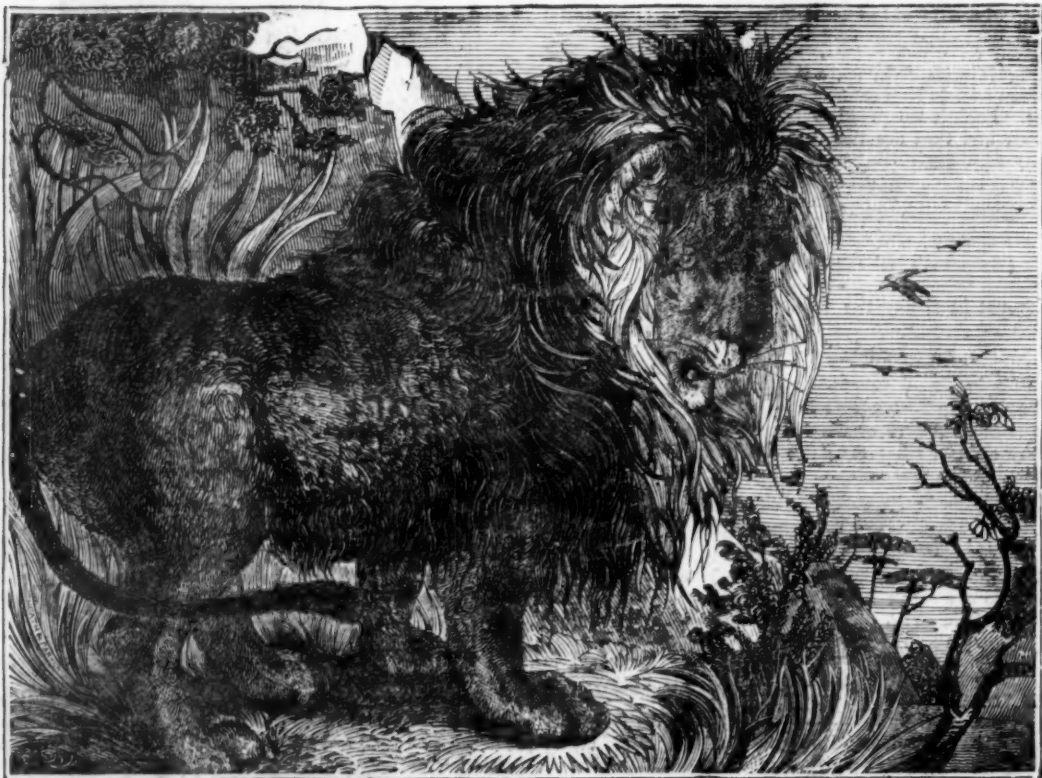
Nero, well known in Wombwell's menagerie, was

of a remarkably mild disposition, and allowed his keepers to take every kind of liberty with him. Strangers were frequently introduced into his den, who were permitted to sit and ride on his back. Nero, during these performances, preserved a look of magnanimous composure, and on the entrance or exit of a new visiter, would merely look round.

The most docile lion that has occurred to our own observation, was one in a travelling menagerie at Amsterdam, where, it may be remarked, that all the animals showed a remarkable degree of tameness and familiarity. The lion alluded to, after being pulled about, and made to show his teeth, &c., was required to exhibit. Two young men, in fancy dresses, entered the spacious cage, and in the mean time, the lion, apparently perfectly aware of what he had to do walked composedly round. He was now made to jump over a rope, held at different heights; next through a hoop and a barrel, and again through the same covered with paper. All this he did freely, compressing himself to go through the narrow space, and alighting gracefully. His next feat was to repeat the leaps through the hoop and barrel, with the paper set on fire; this he evidently disliked, but with some coaxing, went through each. The animals were now all fed, but the lion had not yet completed his share in the night's entertainment, and was required to show his forbearance, by parting with his food. The keeper entered the cage, and took it repeatedly from him; no further resistance than a short clutch and growl was expressed. His countenance had, however, lost its serenity, and how long his good temper would have continued, is doubtful. We did not previously believe that any of the Cat tribe could have been so far tampered with.

S.

[Naturalists' Library.]



THE AFRICAN LION.